

## WHAT IS CLAIMED IS:

1. A sharpening burr for dressing the grinding surface of a pulpstone, said sharpening burr comprising:

- 5           a cylindrical body having an outer surface; and  
          a plurality of teeth formed on said outer surface for engaging said grinding surface of said pulpstone, each of said plurality of teeth having a pair of opposite sides connected by a rounded tip portion.

10       2. The sharpening burr according to claim 1, wherein each of said pair of opposite sides is linear in profile.

3. The sharpening burr according to claim 1, wherein each of said pair of opposite sides is a convex involute in profile.

15       4. The sharpening burr according to claim 1, wherein each of said pair of opposite sides is a concave involute in profile.

20       5. The sharpening burr according to claim 1, wherein said pair of opposite sides form an asymmetrical tooth profile about a radial line of said burr through the center of said tip portion.

25       6. The sharpening burr according to claim 5, wherein one of said pair of opposite sides is linear in profile and the other of said pair of opposite sides is a convex involute in profile.

7. The sharpening burr according to claim 5, wherein one of said pair of opposite sides is linear in profile and the other of said pair of opposite sides is a concave involute in profile.

5 8. The sharpening burr according to claim 5, wherein one of said pair of opposite sides is a convex involute in profile and the other of said pair of opposite sides is a concave involute in profile.

9. A sharpening burr for dressing the grinding surface of a pulpstone, said sharpening  
10 burr comprising:

a cylindrical body having an outer surface; and

a plurality of teeth formed on said outer surface for engaging said grinding surface of said pulpstone, each of said plurality of teeth having a pair of opposite sides connected by a flat tip portion.

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10. The sharpening burr according to claim 9, wherein each of said pair of opposite sides is linear in profile.

11. The sharpening burr according to claim 9, wherein each of said pair of opposite sides  
20 is a convex involute in profile.

12. The sharpening burr according to claim 9, wherein each of said pair of opposite sides is a concave involute in profile.

25 13. The sharpening burr according to claim 9, wherein said pair of opposite sides form an asymmetrical tooth profile about a radial line of said burr through the center of said tip portion.

14. The sharpening burr according to claim 13, wherein one of said pair of opposite sides is linear in profile and the other of said pair of opposite sides is a convex involute in profile.

5 15. The sharpening burr according to claim 13, wherein one of said pair of opposite sides is linear in profile and the other of said pair of opposite sides is a concave involute in profile.

10 16. The sharpening burr according to claim 13, wherein one of said pair of opposite sides is a convex involute in profile and the other of said pair of opposite sides is a concave involute in profile.

17. A sharpening burr for dressing the grinding surface of a pulpstone, said sharpening burr comprising:

15       a cylindrical body having an outer surface; and  
           a plurality of teeth formed on said outer surface for engaging said grinding surface of said pulpstone, each of said plurality of teeth having a pair of opposite sides connected by a pointed tip portion forming an obtuse angle in profile.

20 18. The sharpening burr according to claim 17, wherein each of said pair of opposite sides is linear in profile.

19. The sharpening burr according to claim 17, wherein each of said pair of opposite sides is a convex involute in profile.

25 20. The sharpening burr according to claim 17, wherein each of said pair of opposite sides is a concave involute in profile.

21. The sharpening burr according to claim 17, wherein said pair of opposite sides form an asymmetrical tooth profile about a radial line of said burr through the center of said tip portion.

5 22. The sharpening burr according to claim 21, wherein one of said pair of opposite sides is linear in profile and the other of said pair of opposite sides is a convex involute in profile.

10 23. The sharpening burr according to claim 21, wherein one of said pair of opposite sides is linear in profile and the other of said pair of opposite sides is a concave involute in profile.

15 24. The sharpening burr according to claim 21, wherein one of said pair of opposite sides is a convex involute in profile and the other of said pair of opposite sides is a concave involute in profile.

20 25. In a sharpening burr for dressing the grinding surface of a pulpstone, said sharpening burr comprising a cylindrical body having an outer surface and an axis of rotation, and a plurality of teeth formed on said outer surface for engaging said grinding surface of said pulpstone, the improvement comprising:

each of said plurality of teeth having a lead angle relative to said axis of rotation that varies with axial position along said cylindrical body.

25 26. The improvement according to claim 25, wherein said variation in said lead angle is a periodic variation.

27. The sharpening burr according to claim 26, wherein said variation in said lead angle is a sinusoidal variation.

